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(54) Induction motor power/torque clamping for electric vehicle performance

(57) An induction motor control system (10) for electric vehicles having a DC power supply (12), an inverter (14), an induction motor (16), and a clamping unit (26). The clamping unit (26) applies a clamping value i_{q_clamp} to a real torque current command i_q^* . The clamping value i_{q_clamp} is calculated in a maximum torque current calculation unit 28 and is based on pre-

determined maximum settings for the motor power $P_{\max}$ and torque $T_{\max}$. The clamping value i_{q_clamp} is applied such that the torque current command i_q^* cannot exceed the clamping value i_{q_clamp} , whereby the induction motor produces 16 output power P_{out} and torque T_{out} that is always less than the predetermined maximum settings, $P_{\max}$ and $T_{\max}$.

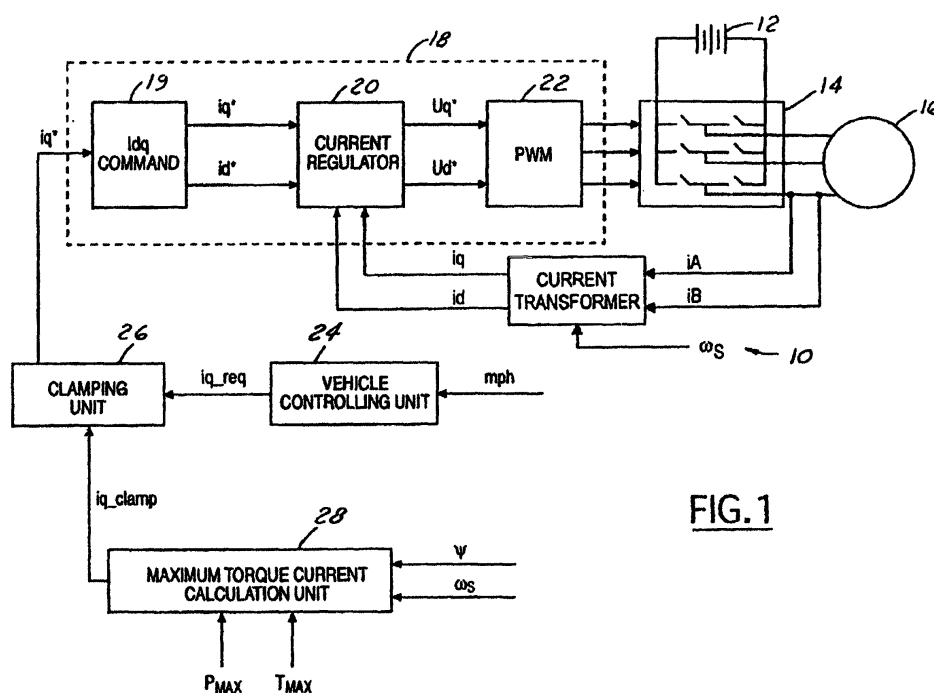


FIG. 1



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EUROPEAN SEARCH REPORT

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The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 4 June 2003	Examiner Beitner, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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Application Number
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